(19) World Intellectual Property Organization International Bureau



1011/1011/19 (0101101) (01011011) (01011011) (01011011) (01011011) (01011011) (01011011) (01011011)

(43) International Publication Date 28 April 2005 (28.04.2005)

PCT

(10) International Publication Number WO 2005/038009 A2

- (51) International Patent Classification7: C12N 1/20, C12P 17/18, A61K 31/535 // (C12P 17/18, C12R 1:465)
- (21) International Application Number:

PCT/IB2004/003380

- (22) International Filing Date: 15 October 2004 (15.10.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 1284/DEL/2003

17 October 2003 (17.10.2003)

- (71) Applicant (for all designated States except US): RAN-BAXY LABORATORIES LIMITED (IN/IN); 19, Nehru Place, New Delhi, Delhi 110019 (IN).

 (72) Inventors; and
 (73) Inventors; and
 (74) Inventors; and
 (75) Inventors; and
 (76) Inventors/Applicants (for US only): KUMAR, Parveen [IN/IN]; 16, 18, 110019 (IN). SHARMA, Sunita (Biv/IN); 135-18, Haryana 134112 (IN). SHARMA, Sunita (Biv/IN); 135-18, Haryana 134112 (IN). SHARMA, Sunita (Biv/IN); 135-18, 1009 (IN). SHUKLA, Anhrudha (IN/IN); 6/148/5., Sector-D., Pocket-G, Vasant Kunj, New Delhi, Delhi 110091 (IN). KUMAR, Sudeep (IN/IN); B-107 Alaknanda Apt., Rampuri, Surya Nagar, Ghaziabad, Uttar Pradesh 201010 (IN). MAURYA, Raj. Kumar (IN/IN); Gyankhard IV/82, Indirapuran, Ohaziabad, Uttar Pradesh 201010 (IN). SATIAL, Vilass (IN/IN); 1381, Sector-29, Noida, Uttar Pradesh 201303 (IN). MITRA, Ashoke (IN/IN); C97, Sarita Vihar, New Delhi, Delhi 110044 (IN). GIGRAS, (S7) Abstract: The invention relates to a new microorganism Streptomyces glaucescens MTCC 5115 and a process for producing the immunosuppressant agent, tacrolimus (FK-506) utilizing the new microorganism Streptomyces glaucescens MTCC 5115. The invention also relates to pharmaceutical compositions that include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment include the tacrolimus (FK-506) and use of said compositions for treatment inc

Paresh [IN/IN]; C/O Shri Jagdish Chander Jitender Kumar, Brass Merchant, Chauraha Gali, Moradabad, Uttar Pradesh 244001 (IN).

- (74) Common Representative: RANBAXY LABORATO-RIES LIMITED; C/O DESHMUKH, Jay R., 600 College Road East, Suite 2100, Princeton, NJ 08540 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,

the immunosuppressant agent, tacrolimus (FK-506) utilizing the new microorganism Streptomyces glaucescens MTCC 5115. The invention also relates to pharmaceutical compositions that include the tacrolimus (FK-506) and use of said compositions for treatment or prevention of the transplantation rejection of organs or tissues such as heart, kidney, liver, medulla ossium, skin, etc.